

## **CITY OF BURBANK**

### **TRAFFIC SIGNAL OPERATIONS SPECIALIST**

#### **DEFINITION**

Under supervision, to perform work related to traffic data collection and analysis, traffic signal timing and controller configuration, traffic signal coordination and monitoring; and perform related duties as required.

#### **ESSENTIAL FUNCTIONS**

Collects and analyzes traffic signal data; designs and implements traffic operations by programming traffic controllers; analyzes specialized traffic signal operations and systems; monitors, operates, and configures traffic signal devices, including inductive loops and cabinet equipment, battery backup systems, pan-tilt-zoom and video detection cameras; assists in monitoring and configuration of changeable message and parking information signs, twisted pair and fiber optic cabling, and wireless and fiber optic communication devices; coordinates exchange data with local and regional traffic control centers; analyzes traffic signal operations and installs specialized traffic signal systems associated with Intelligent Transportation System (ITS) components at the Transportation Management Center (TMC); gathers, organizes, analyzes, and archives traffic data collected by ITS systems; prepares and follows operations plans for incident management and traffic surveillance systems; prepares conceptual plans, specifications, and cost estimates for the modification and alteration of the TMC; operates a variety of electronic and computerized traffic signal operating control and test equipment; schedules, inspects, and assists with the oversight of contract work; operates a computer with related software; maintains and operates the TMC; prepares and maintains records and reports, both manually and electronically; uses independent judgement and decision-making skills based on standard policy or working procedures; communicates with and assists the public with questions and complaints on traffic related issues; may train, supervise, and evaluate employees; drives on City business.

#### **MINIMUM QUALIFICATIONS**

##### **Employment Standards:**

- Knowledge of – traffic operation principles, practices, and techniques; the fundamentals of electronics, physics, and network telecommunication systems; spelling, grammar, and punctuation.
- Skill in – operating modern computers and related software; interpreting wiring diagrams; preparing and understanding basic traffic engineering drawings, plans, and specifications; comprehending electronic logic diagrams, electrical drawings, and specifications; operating calculators and engineering software related to the design and operation of traffic signals; using independent judgement and decision-making skills based on standard policy or working procedures; operating standard tools and electronic equipment to test and maintain ITS devices.
- Ability to – make effective and rapid adjustments while operating equipment that controls and monitors multiple conditions; prepare and understand traffic signal operation drawings, plans, and specifications; prepare and comprehend electric logic diagrams and

drawings; learn and operate Time Domain Reflectometer and Optical Time Domain Reflectometer; diagnose and test traffic signal communications systems; keep and maintain computerized records; acquire a working knowledge and implement best practices for construction and operation of traffic signals and intelligent transportation systems; communicate effectively, both orally and in writing; establish and maintain effective working relationships with supervisors, fellow employees, contractors, and the public; follow working procedures and safety policies.

**Education/Training:** Any combination of education and/or experience that has provided the knowledge, skills, and abilities necessary for acceptable job performance as determined by the City. Example combination includes, but is not limited to graduation from an accredited college or university with a Bachelor of Science Degree in Engineering, Computer Science, or related field and one year of experience working with traffic signal design, analysis, or repair experience; or International Municipal Signal Association (IMSA) Traffic Signal Technician Level II certification or Transportation Professional Certification Board Professional Traffic Operations Engineer (PTOE), and one year of experience working with traffic signal design, analysis, or repair experience; or graduation from high school or equivalent and five years of experience working with traffic signal design, analysis, or repair experience.

**Special Conditions & Requirements:** The ability to move objects weighing up to 30 pounds; exert moderate physical effort, bend in all directions, climb stairs and ladders, walk on uneven surfaces, make field observations, and remain in a stationary position for extended periods of time; and have extensive exposure to video display terminals/computers. COLOR VISION: Keen Color Vision.

**License & Certificates:** A valid California Class "C" driver's license or equivalent at time of appointment.

## **SUPPLEMENTAL INFORMATION**

**Desirable Qualifications:** IMSA Traffic Signal Technician Level II certification or PTOE certification.